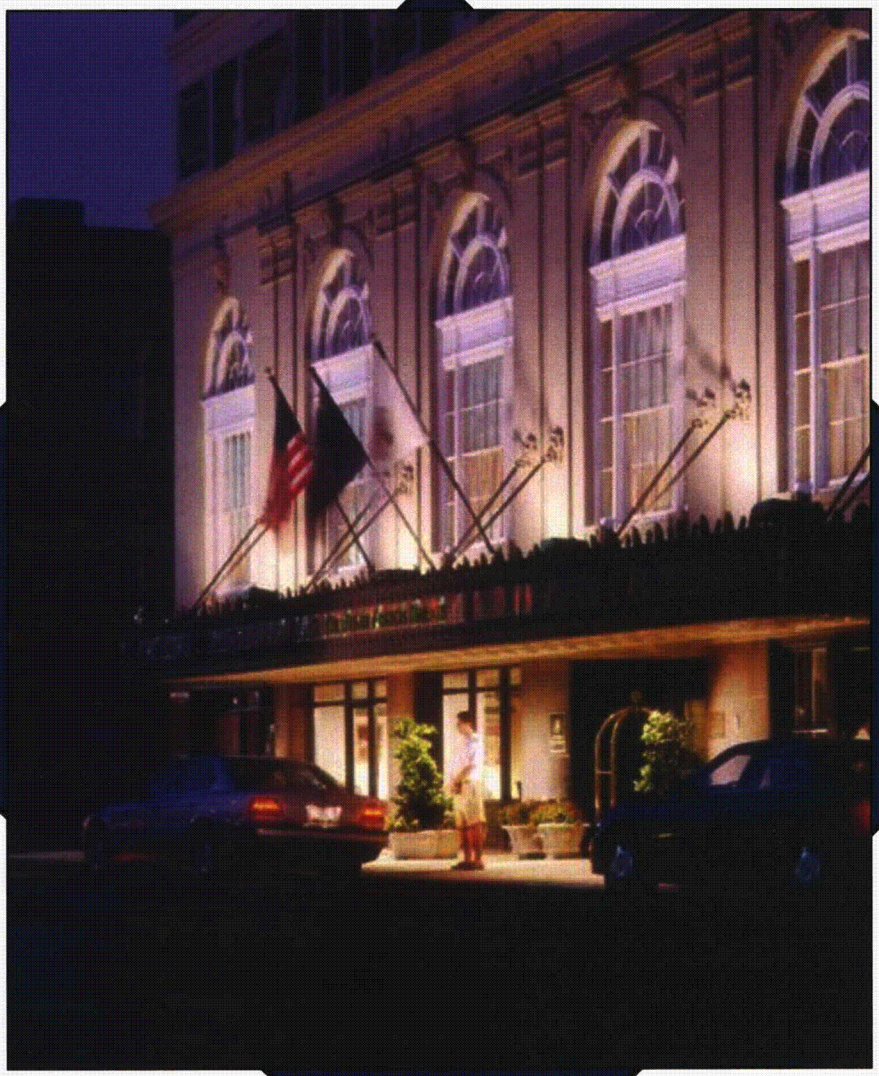
2009

THE INTERNATIONAL CONFERENCE

ON

SIMULATION TECHNOLOGY FOR POWER PLANTS

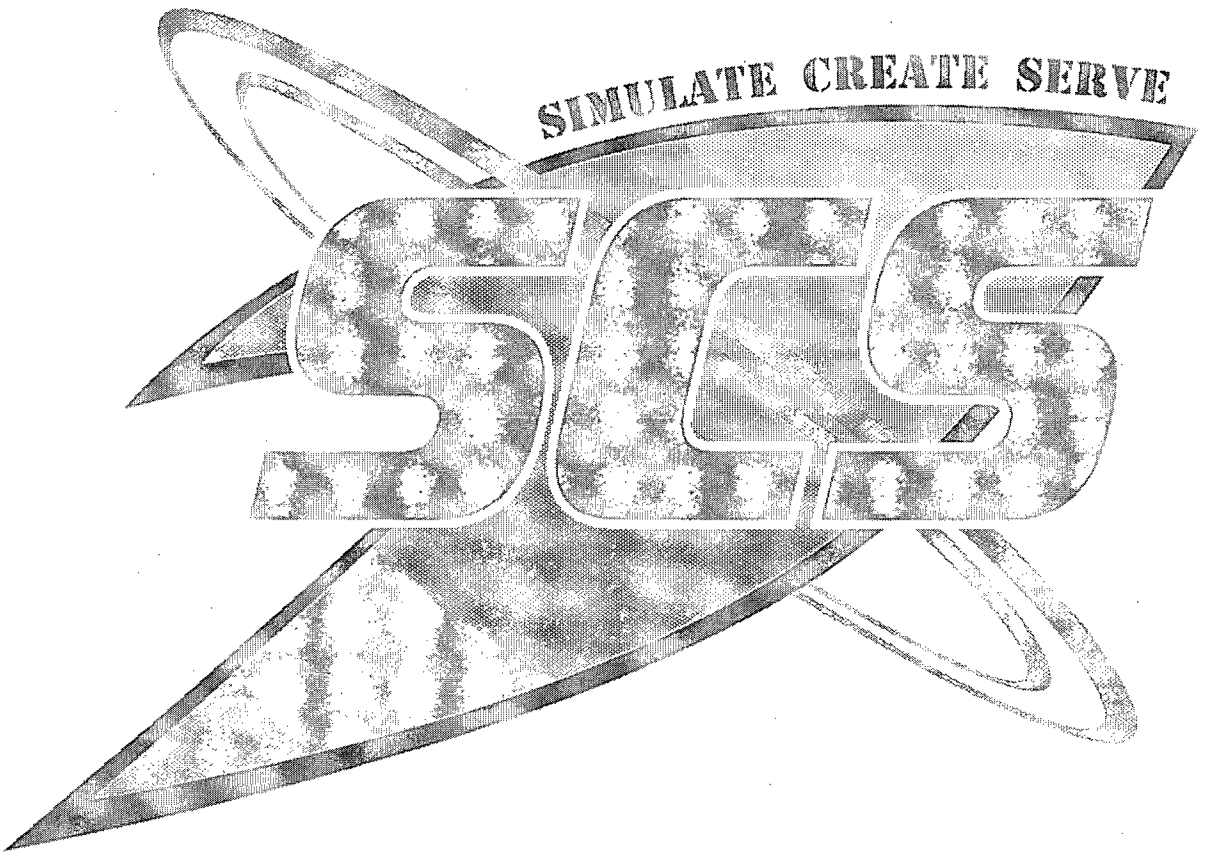


FRANCIS MARION HOTEL

DOWNTOWN CHARLESTON, SOUTH CAROLINA

FEBRUARY 9 -13

NOTES:



Brought to you by :
The Society for Modeling & Simulation International (SCS)

GENERAL INFORMATION

PPS'09 REGISTRATION:
Foyer
Sunday: 3:00 pm to 6:00 pm
Monday-Thursday: 7:00 am to 5:00 pm

PPS'09 RECEPTION:
Monday, February 9
Gold Ballroom
5:30 pm to 7:30 pm
Sponsored by:

MAPPS

PPS'09 EXHIBIT AREA:
Gold Ballroom
10:00 am to 5:00 pm, Monday-Tuesday
10:00 am to 3:30 pm, Wednesday

PPS'09 BREAKFAST:
Gold Ballroom
Service 7:00 am to 8:00 am
Monday-Wednesday

PPS'09 COFFEE BREAKS:
Gold Ballroom
AM Coffee Break 10:00 am to 10:30 am
PM Coffee Break 3:00 pm to 3:30 pm
Monday-Wednesday

USUG ANNUAL MEETING:
Thursday, February 12
Carolina A Ballroom
8:30 am to 12:00 pm
NOTE: Regional Workshops meet 1:30 pm to 5:00 pm

EXHIBITOR INFORMATION

Western Services Corporation

WSC, headquartered in Frederick, Maryland, is a global simulation and services company. It was founded in 1995, and has been growing steadily based on the quality and efficiency of its products, and its flexible team-oriented approach for serving its customers.

WSC's primary focus is the development and deployment of advanced 3KEYSOFTWARE® Simulation Technology, which consists of the 3KEYMASTER™ simulation platform and a suite of unified graphical modeling tools which include 3KEYRELAP5-RT™ which is an adaptation of Idaho National Laboratory (INL) thermal-hydraulics and neutronic models running within the 3KEYMASTER Environment. Even though operator training simulators, both new simulators and the modernization or refurbishment of existing simulators for all type of power and process plants are WSC's main focus, WSC has achieved significant growth in Simulation Assisted Engineering (SAE), based on the strength of its "engineering-grade" simulation technology. Leading companies have been the external driver for SAE, and are embedding WSC's technology in their engineering processes to address the challenges of improving quality up-front, and reducing complex engineering development and commissioning cycles.

WSC is committed to continually improving the capabilities of its technology and widening the applicability of its simulation technology to complex systems. To further this goal, WSC has a vigorous market-focused R&D program and a strong commitment to customer service. WSC is ready to serve you globally for your complete simulation needs.

CONTACT: Debbie Van de Poll
deborah@ws-corp.com
7196 Crestwood Blvd #300
Frederick, MD 21703
www.ws-corp.com

GSE Systems, Inc.

GSE Systems is the World Leader in real-time simulation and training solutions for the electric power, oil and gas and chemical process industries. With over 180 employees dedicated to real time simulation for the energy industry, and offices in Maryland, Georgia, Sweden and China, GSE has delivered over 500-simulation and training applications to 200 customers in 30 countries spanning the globe.

GSE (then known as The Singer Company) built the first full scope simulator for nuclear industry in the early 1970s. Since then companies building first of a kind engineering projects such as Westinghouse for the AP1000, PBMR Ltd.for the Pebble Modular Reactor and NuScale Power for the NuScale reactor continue to team with GSE for its robust modeling tools, on-time performance record and cooperative working relationships.

Our JADE and Xtreme suites of modeling tools provide high fidelity, high definition solutions for both the nuclear and fossil industries. TOPMERET is a true six equation solution for two-phase fluid systems (no mixing) which gives the user confidence in the solution across the entire range of operations without the need for a lot of "tuning". GSE's RELAP5 3D HD© solution provides has taken the lid off the RELAP5 black box. Users can see what is happening inside the code and ensure repeatable real-time performance with all of the advantages of the world's most popular analysis code.

Whether upgrading your current simulator for better performance, using simulation to test your control system strategy and design, or looking for technology to make your training staff more efficient, GSE has the technology and resources to be your partner today and well into the future.

CONTACT: Steve Freel
Power@gses.com
1332 Londontown Blvd
Sykesville MD 21784
www.gses.com

Studsvik

Studsvik will be demonstrating the GARDELSIM Core Monitoring Software, Benchmarking Analysis Services, Open Fast Cross-Sections (OFX) Module for S3R. Studsvik is a leading supplier of core modeling software to the commercial nuclear industry. Studsvik provides engineering grade core models for use in real-time training applications. Studsvik provides software for core monitoring and also provides simulator benchmarking services.

CONTACT: Jeffrey Borkowski
Jeffrey.borkowski@studsvikscandpower.com
504 Shoup Avenue, Suite 201
Idaho Falls, ID 83402
TEL: (208) 522-4440
www.studsvikscandpower.com

L-3 Communications MAPPS Inc.

When you are looking for increased reliability in your power plant's performance, you can count on L-3 MAPPS' simulation experience to get you there. Our dedication to true-to-life power plant simulators ensures that your personnel have the knowledge required to safely and efficiently operate your power plant. Providing more than just training devices, our simulator solutions—powered by L-3 MAPPS' unparalleled Orchid® suite of simulation products—will elevate your engineering team to new heights in addressing plant design issues, procedural deficiencies, and reliability improvements.

L-3 MAPPS simulators provide superior real-world power plant training. L-3 MAPPS offers a variety of products and services, including full-scope simulators, part-task trainers, simulator retrofits, and upgrades. We provide design-to-completion turnkey systems, specific components, and simulator design tools as required by the customer. With a worldwide presence, a solid leadership position and the ability to provide any level of customer support, L-3 MAPPS ensures the success of your simulator projects. Our simulators offer the highest quality in simulation fidelity and training to provide trainees and instructors with user-friendly tools for learning, controlling, and exploring complex power plant systems.

FULL SCOPE POWER PLANT SIMULATORS

The superior training environments of L-3 MAPPS simulators provide clear advantages for obtaining operator certification, optimizing plant operating procedures and reducing costs. Operators trained on L-3 MAPPS simulator environments acquire the skills necessary to increase plant performance, minimize downtime, and provide confident emergency response. Simulator uses include interactive team training, severe incident management, plant design testing, and start-up/shutdown optimization.

L-3 MAPPS replica-quality hardware controls and touch-screen virtual panels create realistic and credible control environments. Real-time responses to operator actions and interactive instructor controls ensure maximum training effectiveness and adaptability. Any scenario, no matter how complex or dangerous in a real plant, can be reproduced, monitored, and varied in real time, providing a highly valuable tool for training and plant engineering.

Our commitment to customer support extends far beyond industry norms. L-3 MAPPS' unique knowledge transfer program allows customers to gain expertise and total confidence in the simulator. Users can directly implement simulator modifications to exactly reflect plant changes, evolve their training programs, and expand simulator use into other areas.

SIMULATOR UPGRADES

Evolving training needs, greater fidelity expectations, changing standards, plant modifications, plant fuel updates, obsolescence, and plant life extensions are some of the realities the simulation industry now faces. To keep up, simulator owners need to take advantage of rapid advances in computing technology and implement cost-effective updates. L-3 MAPPS provides updates to legacy simulator platforms, including computer hardware, the instructor station, and/or the control room panel interface system. L-3 MAPPS upgrades take advantage of available computing power to improve the modeling fidelity of the reactor core, nuclear steam supply systems and all other plant systems.

EXPERIENCE

For more than 35 years, we have worked with our customers to create superior training systems and have established ourselves as the world's pre-eminent manufacturer of power plant simulators. L-3 MAPPS is a company of people with ideas and vision, with a desire to create value through innovation and with the experience to achieve success.

CONTACT : André Rochon
power.mapps@L-3Com.com
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8565 Côte-de-Liesse, Saint-Laurent
Québec, Canada, H4T 1G5
TEL: 1-514-787-4999
www.L-3com.com/MAPPS

Fossil Agenda

Fossil Chair: Erica Finley – General Physics

MONDAY, February 9, 2009
Carolina B Ballroom

8:30 am – 9:15 am

Fossil Track Opening and Introductions - Erica Finley, Fossil Chair

9:15 am – 10:00 am

Session 1: Chair Erica Finley, General Physics Corporation

> ***ANTHEM Thermal-Hydraulics Modeling for Supercritical Pressure Fossil Power Plants*** *- Sergio Gaudio, L-3 Communications MAPPS Inc.*

10:00 am–10:30 am

Break – Gold Ballroom

10:30 am – Noon

Session 2: Chair William H. Talbot, Ameren Energy Resources

> ***Real-Time Model for Performance Monitoring*** *- Michael Coffey, TVA, Sastry Munukutla and Robert Craven, Tennessee Technological University*
> ***Developing DCS Based Simulators for Circulating Fluidized Bed Applications*** *- Eugene Abruzere, Emerson Process Management Power & Water Solutions and Alex Lekich, GSE Systems, Inc.*
> ***Dynamic Simulation of Pressure Transient of the Boiler Island of a Coal Combustion Power Plant*** *- Tong Li, Jonathan Macron and Olivier Cadet, Air Liquide Delaware Research and Technology Center*

Noon – 1:00 pm

Lunch

1:00 pm – 3:00 pm

Session 3 - Joint Session – to be held in conjunction with nuclear track Chairs Erica Finley, General Physics and Mac McDade, Progress Energy

> ***Panel Discussion: Potential Solutions for Virtual Simulation*** *(from a DCS Perspective)*
> ***History*** *– Mac McDade, Progress Energy*
> ***Definitions of Simulator Types*** *– Bob Lancaster, General Physics Corporation*
> *Joint Session Panelists:*

Eugene Abruzere, Emerson Process Controls, Inc.
Rick Kephart, Emerson Process Controls, Inc.
Kim Fenrich, ABB Automation
Gregory Morton, GE Energy

3:00 pm — 3:30 pm

Break — Gold Ballroom

3:30 pm to 5:00 pm

Session 4: Chair Rick Stuart, CPS Energy

> ***Total Simulation- Integrating Operations, I&C, and Electrical DCS Training into a Generic Simulator*** – *Brett Davenport, Xcel Energy*
> ***Power Plant Simulators - An Essential Tool for Closing the Competency Gap of Power Plant Operators as Well as Benchmarking Tool for Power Plant Efficiency Improvements*** - *Mohd Razif Bin Abd Halim, Tenaga Nasional Berhad (TNB), Malaysia*
> ***The Need for Fundamental Training for Power Plant Operators*** – *Don Glaser, Simulation Solutions and TBD, Public Service Electric & Gas*

5:00 pm

Adjourn

5:30 pm — 7:30 pm

Vendor Exhibit Reception

TUESDAY, February 10, 2009
Carolina B Ballroom

8:30 am — 10:00 am

Session 5: Chair Brett Davenport, Xcel Energy

> ***Design Concepts of Two Full Scope Fossil Simulators for CPSE Energy*** - *O. Ashy, S. Korolev, Western Services Corporation*
> ***Simulator Maintenance and Load Control*** – *William H. Talbot, Ameren Energy Resources*

10:00 am — 10:30 am

Break — Gold Ballroom

10:30 am — Noon

Session 6: Chair Erica Finley, General Physics

> ***Roundtable Discussion Topics:***
> *Future Simulation Needs and Solutions*
> *Simulating Environmental Issues*

Noon — 1:00 pm

Lunch

1:00 pm – 3:00 pm

Session 7: Chair Gary Terpstra, TVA

> ***The Basics of Simulator Specification*** *–Bob Lancaster, General Physics*
> ***Managed Team Approach to Simulator Construction*** *– Bruce Kelly, Sega, Inc*
> ***Update on SCS Membership and Solicitation of Feedback*** *– DJ Weed, The Society for Modeling and Simulation International*

3:00 pm – 3:30 pm

Break – Gold Ballroom

3:30 pm – 5:00 pm

Session 8: Un-Chaired

> ***Simulator-Users Question and Answer Session*** *(Closed Session – No Simulator Vendors Please)*
> **This is a user only session where unbiased opinions and individual experiences can be shared amongst end-users.*

5:00 pm

Adjourn

Tuesday Evening

Reception TBD

WEDNESDAY, February 11, 2009
Carolina B Ballroom

8:30 am – 10:00 am

Session 9: Simulator Training Exercises and Evaluation Roundtables
Erica Finley, Bob Lancaster and Tara Stuart – General Physics

> ***Simulator Training Exercises: What Works?*** *– Attendees should be ready to share their best simulator training exercise.*
> ***Simulator Training Evaluation*** *– Attendees should be ready to share their simulator evaluation best practices.*

10:00 am – 10:30 am

Break – Gold Ballroom

10:30 am – Noon

Session 10: Chair Erica Finley, General Physics Corporation

> ***Experiences on DCS Based Full Scope Simulator Implementation*** *- Mike Cabaniss & Alex Lekich, GSE Systems, Inc.*

Noon

Adjourn Conference

Nuclear Agenda

Nuclear Chair: Mac McDade

SUNDAY, February 8, 2009
Laurens Room

5:00 pm – 6:00 pm

USUG Executive Session — Chair Mac McDade

MONDAY, February 9, 2009
Carolina A Ballroom

8:30 am – 10:00 am

Session 1: Kick off

8:30 am – 9:00 am

Welcome: Introduction and brief discussion of Workshop layout and logistics — Mac McDade

9:00 am – 10:00 am

Vendor Updates

10:00 am – 10:30 am

Break — Gold Ballroom

10:30 am – Noon

Session 2: Core and Thermo Hydraulic — James Florence, Cooper Station

> ***Nuclear Power Plant Simulator Benchmark Calculations with the RE-TRAN-3D Computer Code*** — *Craig Peterson, John Shatford , Jorge Arpa — CSA, Inc.*

> ***Results from the Nodal Expansion Method-based Reactor Core Model at SONGS*** — *George Marengo — Southern California Edison*

> ***Assessing Simulation Results: CPS Thermal-Hydraulics ANTHEM Upgrade*** — *J.M. Honzell– Exelon Clinton Power Station, S. Gaudio-L-3 MAPPS*

Noon – 1:00 pm

Lunch

1:00 pm — 3:00 pm

Session 3: Joint Session - held in conjunction with fossil track
Chairs Erica Finley, General Physics and Mac McDade, Progress Energy

> ***Panel Discussion: Potential Solutions for Virtual Simulation*** *(from a DCS Perspective)*
> ***History*** *– Mac McDade, Progress Energy*
> ***Definitions of Simulator Types*** *– Bob Lancaster, General Physics Corporation*
> *Joint Session Panelists:*
Eugene Abruzere, Emerson Process Controls, Inc.
Rick Kephart, Emerson Process Controls, Inc.
Kim Fenrich, ABB Automation
Gregory Morton, GE Energy

3:00 pm – 3:30 pm

Break

3:30 pm – 5:00 pm

Session 4: Recent Projects — James Bigelow, Pacific Gas & Electric

> ***Cofrentes NPP Simulator: Optimized Relocation*** *— Norberto Rivero, Tecnatom S.A.*
> ***Modernization of the Wolsong 2,3,4 Simulator*** *— C. Vincent & G. Jaar, L-3 MAPPS*
> ***RELAP5 3D-RT: Implementation Experience on 3 Loop PWR*** *— Zen Wang, GSES*

5:00 pm

Adjourn

5:30 pm — 7:30 pm

Vendor Exhibit Reception

TUESDAY, February 10, 2009
Carolina A Ballroom

8:30 am – 10:00 am

Session 5: Simulation Tools and Control Systems — James Florence

> ***Building a Simulated GE NUMAC from off the Shelf Components*** *— Andrew Jedlowski, Exelon*
> ***RELAP5 Models in 3KeyMaster Simulation Environment*** *— I Arshavsky, V Soevak, V Nosatov, H Sarsour, A Trofimova, L. Pogosbekyan, V. Galkin- Western Services Corporation*
> ***AP1000 Phase III Human Factor Engineering*** *— Westinghouse*

10:00 am - 10:30 am

Break — Gold Ballroom

10:30 am - Noon

Session 6: Supporting the Re-staff — Tim Vriezema, DC Cook Station

> ***The Second Simulator*** — *Tim Vriezema*

> ***Soft Panel Simulator-Filing the Training Gap*** — *M. Fendley, GSES*

Noon - 1:30 pm

Lunch

1:30 pm - 3:00 pm

Session 7: New Builds — Tommy Albright, TVA

> ***3KeySafe-Configuration Management Solution to support the New simulators and the life Cycle*** — *Vinay Mehra, Oussama Ashy-WS Corp.*

> ***Challenges of 1st of a kind Simulator Development*** — *Steve Freel, GSES*

3:00 pm - 3:30 pm

Break — Gold Ballroom

3:30 pm - 5:00 pm

Session 8: More Recent Projects — Lee Linton, Crystal River Station

> ***Upgrade and Modernization of Full Scope Simulators at Doel and Tihange (Belgium)*** — *Pascal Gain, Cory's T.E.S.S.*

> ***Refurbishment of the SONGS Simulator Main Control Room Panels*** — *Vincent Gagnon, Southern California Edison*

> ***Digital Control V&V Simulation Platform for the CPR 1000*** — *Oliver Tsaoi, GSES*

5:00 pm

Adjourn

WEDNESDAY, February 11, 2009
Carolina A Ballroom

8:30 am - 10:00 am

Session 9: Core testing — Rich Robenstein, Indian Point

> ***Simulator Core Update Tuning and Testing*** — *Rich Robenstein*

> ***Industry Panel on Core Testing*** — *Charlie Walker, Calvert Cliffs & Scott Cupp, Entergy ANO-1*

10:00 am — 10:30 am

Break — Gold Ballroom

10:30 am - Noon

Session 10: NRC Update — Larry Vick, USNRC

12:00 - 1:30

Lunch

1:30 pm - 3:00 pm

Session 11: ANS 3.5 200X update — Tim Dennis with members of the Working Group

3:00 pm - 3:30 pm

Break

3:30 pm - 5:00 pm

Session 12: ANS 3.5 200X update (cont) — Tim Dennis with members of the Working Group

5:00 pm

Adjourn

THURSDAY, February 12, 2009

CAROLINA A BALLROOM

8:30 am - 10:00 am

Session 11: USUG Annual Business Meeting (USUG members only) — Mac McDade

10:00 am - 10:30 am

Break — Gold Ballroom

10:30 am - Noon

Session 12: USUG-Inspections and results (USUG members only) — Tim Cassidy

> Other USUG Subjects

Noon - 1:30 pm

Lunch

CAROLINA A — CALHOUN — LAURENS

1:30 pm - 5:00 pm

Session 13: Regional Work Shops — Regions

5:00 pm

Adjourn Conference

FRIDAY, February 13, 2009
Laurens Room

9:30 am - 4:00 pm

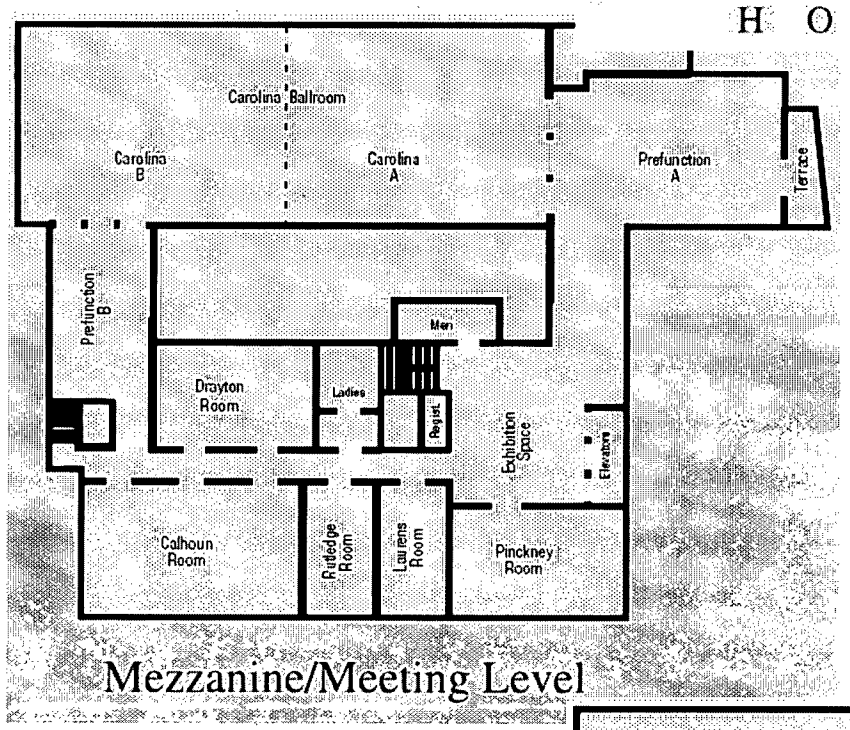
L-3 MAPPS Owners Circle™ Conference (by invitation only) — Bernhard Weiss, L-3 MAPPS

4:00 pm

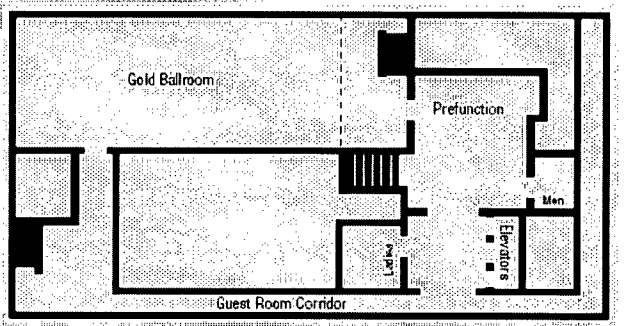
Adjourn

NOTES:

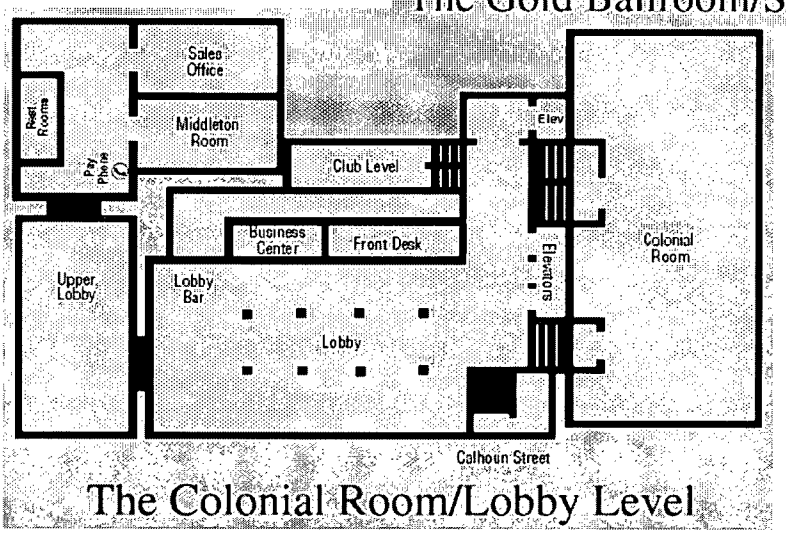
FRANCIS MARION
HOTEL



Mezzanine/Meeting Level



The Gold Ballroom/Second Floor



The Colonial Room/Lobby Level

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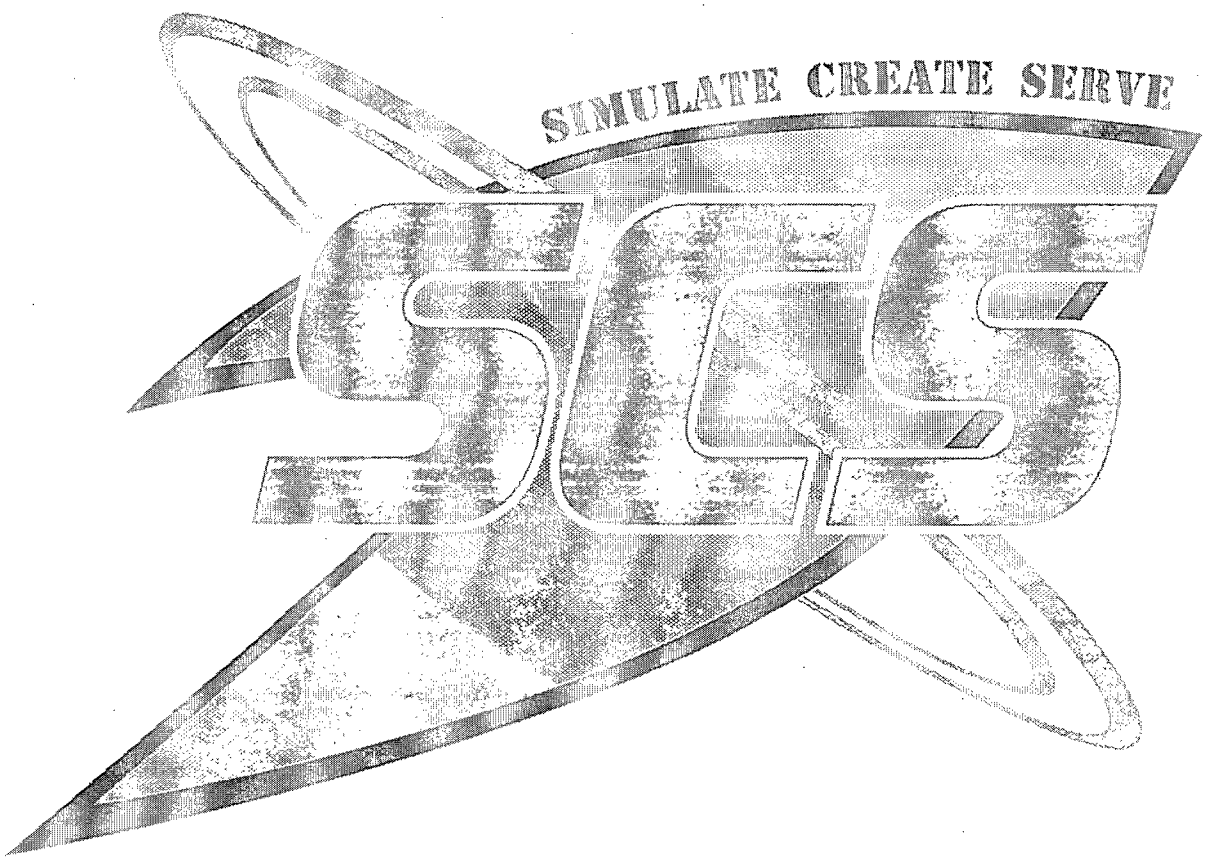

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